

WHAT'S IN A NAME? LEPIDOPTERA: HESPERIIDAE: PYRGINAE:
TELEMIADES HÜBNER 1819 [*PYRDALUS* MABILLE 1903]:
NEW COMBINATIONS *TELEMIADES CORBULO* (STOLL)
AND *TELEMIADES OICLUS* (MABILLE)—AND MORE

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Abstract.—Both the Central American skipper butterfly *Achlyodes oiclus* Mabilie and the South American *Pyrdalus corbulo* (Stoll) belong in *Telemiades*. *Pyrdalus* becomes a **junior synonym** of *Telemiades*. *Pyrdalus corbulo cora* Evans, which is really a species (not a subspecies), is a **new synonym** of *Telemiades oiclus*, **new combination**. Though differing sharply in wingshape and color pattern, *T. oiclus* and *Telemiades corbulo*, **new combination**, share a distinctive male secondary sex character and are, in both sexes, genitally similar to each other and to *T. nicomedes* (Möschler). Grown caterpillars of *T. oiclus* and *T. nicomedes* resemble each other (and suggest slugs). DNA barcoding further supports the relationship of these species. With its brown-forewing/brown-and-yellow-hindwing adult color pattern, *T. oiclus* superficially resembles 13 other species of skippers reared in the Area de Conservación Guanacaste (ACG) of northwestern Costa Rica. Of these presumably mimetic species, one is raised from reduction to subspecific rank, and two are raised from synonymy, to gain **reinstated status**: *T. gallius* (Mabilie), *T. chrysorrhoea* (Godman and Salvin), and *Eracon lachesis* (Dyar). The pupa of *T. oiclus* shares distinctive features with the pupae of other species of *Telemiades*. All eight species of *Telemiades* reared in the ACG feed only on leaves of plants in the family Fabaceae. Six eat various species of *Inga* and, in a relatively few cases, species in three other mimosoid genera, whereas *T. oiclus* and *T. nicomedes* each use two species in one papilionoid genus—*Dioclea* and *Machaerium*, respectively.

Key Words: nomenclature, genitalia (male and female), secondary sex character, facies, mimicry, pupa, caterpillar, foodplants, Fabaceae, *Dioclea*, *Machaerium*, *Inga*, Area de Conservación Guanacaste, Costa Rica

Our grasp of evolution and its biodiversity products improves with better scientific names.

More than a century ago, the Central American species of skipper butterfly that is central to this paper was described, named, and misplaced in an older genus by a worker who, 14 years later, proposed a new and ap-

propriate genus—but only for a different-looking South American skipper species. Half a century after that, another worker misapplied the specific name of the Central American species and described and named that taxon again—but placed it (as a subspecies of the South American species) in the appropriate genus. Details follow.

Mabille (1889: 25, fig. 3) described *Achlyodes oiclus* from a single female from “Chiriqui” (today a Pacific province in western Panama) with a cursory printed account of superficial appearance and a crude black-and-white cut of dorsal and ventral wing surfaces. Godman and Salvin (1895: vol. 2, p. 396, vol. 3, pl. 86, figs. 20, 21) briefly redescribed the type specimen of *A. oiclus* and captured its odd facies in excellent color paintings of dorsal and ventral wing surfaces, thus making it relatively easy to identify, both then and now. Mabille (1903) described the genus *PyrDALUS* for one South American species, *PyrDALUS corbulo* (Stoll). This skipper was originally described (from Surinam) in the genus *Papilio* in 1781 and was transferred, a century thereafter, to *Celaenorhynchus*.

Evans (1953: 80) treated what he called “*oiclus* Mabille” as a taxon in the genus *Bolla*. Pointing out that Evans, in so doing, had to be dealing with something other than *Achlyodes oiclus*, Steinhauser (1989) restored that combination and applied it to a female from Turrialba, Costa Rica, in the Allyn Museum of Entomology. Because Evans’s concept of *oiclus* was wrong, he failed to recognize a male and female of this species (from Honduras) in the British Museum (Natural History) and described them anew as *PyrDALUS corbulo cora* Evans (1953: 32). Here his genus-level insight was good; but, as in many other cases, he lumped at the species level (Burns and Janzen 2001: 19–20). What he described is really a distinct species, not a subspecies of *P. corbulo*. *PyrDALUS cora* Evans, **new status**, is a **new synonym** of *PyrDALUS oiclus* (Mabille), **new combination**.

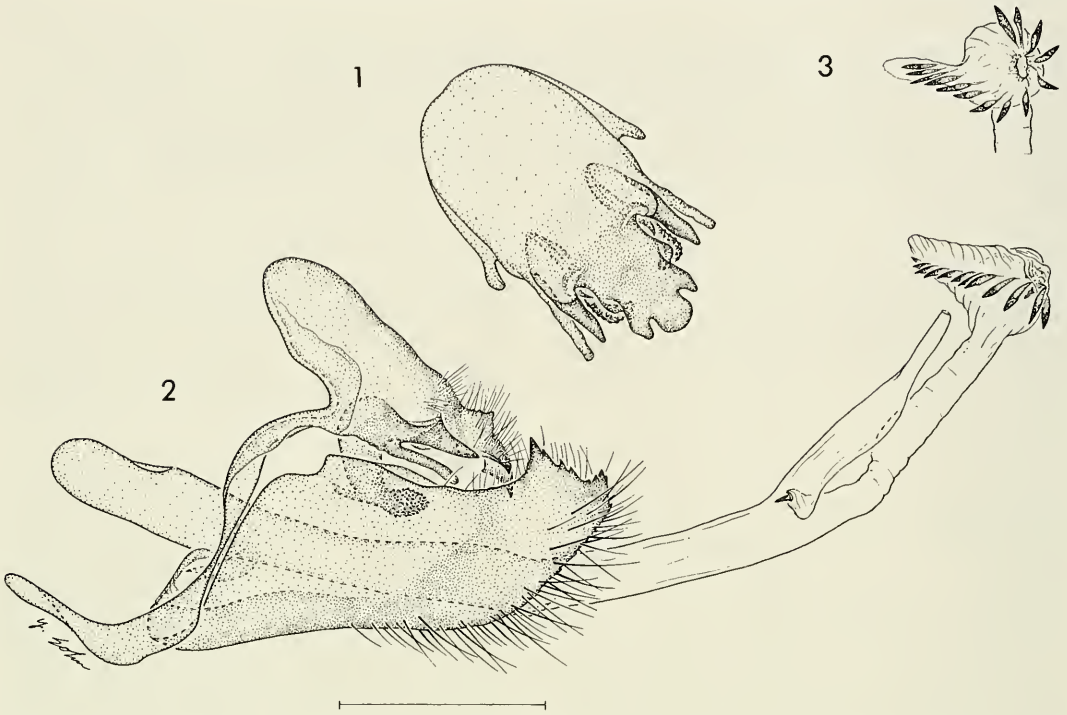
But *PyrDALUS*, which groups two closely related species of skippers, does not warrant generic rank. In characterizing *PyrDALUS*, Evans (1953: 31) wrote, “Genitalia, palpi and antennae as in *Telemiades*. ♂ up[per]f[orewing] with a costal fold . . .,” which also applies to most species of *Telemiades*. It turns out that *PyrDALUS* is a small subdivision of the sizeable, diverse,

and taxonomically challenging neotropical genus *Telemiades*.

From data in three of the foregoing nomenclatural efforts, we know that *Telemiades oiclus*, **new combination**, ranges, at the very least, from Honduras to Panama. Judging from our experience in the Area de Conservación Guanacaste (ACG) in northwestern Costa Rica (Burns and Janzen 2001, Janzen and Hallwachs 2005), *T. oiclus* is a rainforest skipper, occurring from about 520 to 320 m on Atlantic (Caribbean) foothills of the Cordillera de Guanacaste and feeding, as a caterpillar, on mature leaves of two large rainforest vines, *Dioclea malacocarpa* Ducke and *D. wilsonii* Standl. (Fabaceae). It may well go lower in this general region because its foodplants do. However, the bioinventory has yet to reach the ACG lowest limit (200 m) and will not exceed that limit. A series of 21 adults (reared from 36 wild-caught caterpillars) all beseeching an informative name catalyzed this study.

MATERIALS

Except for those marked AMNH (which are in the American Museum of Natural History, New York, NY, USA), adult specimens examined of each of the two species here moved to *Telemiades* are in the National Museum of Natural History (USNM), Smithsonian Institution, Washington, DC, USA; and this depository does not appear in the following specimen lists. These start with numbers of adult males and females examined, then (in parenthesis) numbers of male and female genitalia compared. Wherever applicable, the lists specify Janzen and Hallwachs ACG rearing voucher codes and adult eclosion dates, and (in parenthesis) genitalia dissection codes (those of Burns begin with X-). The rearing codes give, in tripartite-and-hyphenated form, the last two digits of the year that the caterpillar was collected, SRNP, and a number unique for that year. SRNP stems from Santa Rosa National Park, which is now a part of the ACG.



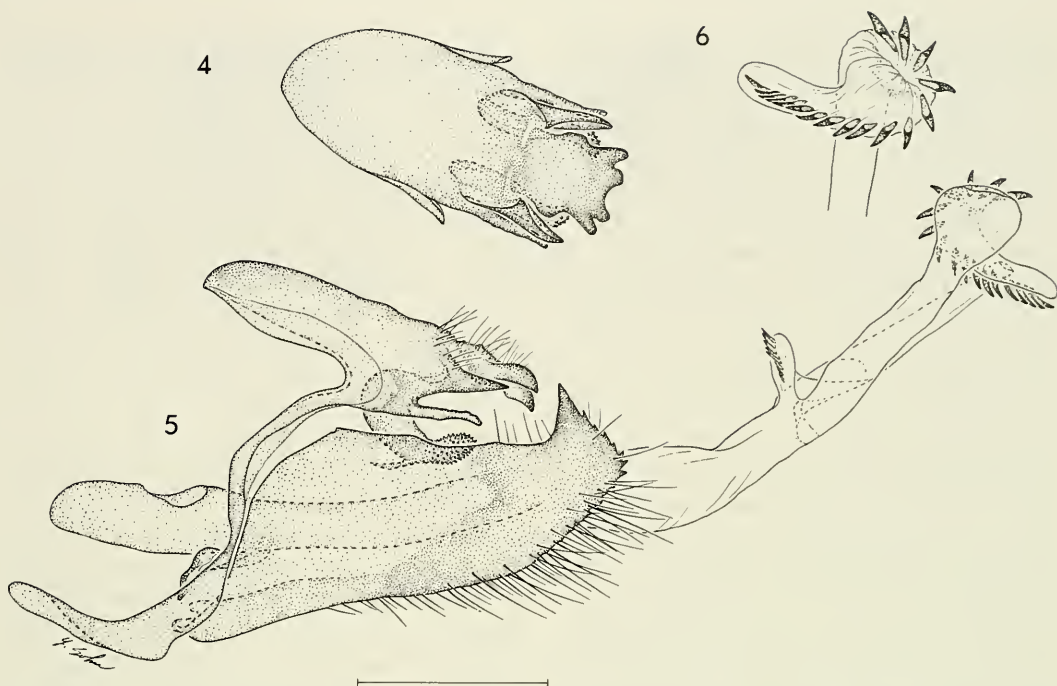
Figs. 1–3. Male genitalia of *Telemiades oiclus* from the ACG, Costa Rica (00-SRNP-21533, X-5061); scale = 1.0 mm. 1, Tegumen, uncus, and gnathos in dorsal view. 2, Complete genitalia (minus right valva), with everted vesica, in left lateral view. 3, Cornuti at distal end of vesica in another view.

Information on rearing of caterpillars and on handling and storage of genitalia may be found in Burns and Janzen (2001) and Janzen and Hallwachs (2005) and in Burns (1997), respectively.

Telemiades oiclus.—12 ♂, 13 ♀ (6 ♂, 6 ♀). COSTA RICA: Area de Conservación Guanacaste: Sector Pitilla, Sector San Cristobal, and Rincon Rainforest, 9 ♂, 12 ♀ as follows: 99-SRNP-5157, 27 May 1999, ♀ (X-5810); 00-SRNP-11806, 15 Aug 2000, ♂; 00-SRNP-21533, 31 Oct 2000, ♂ (X-5061); 00-SRNP-22202, 7 Jan 2001, ♀ (X-5062); 01-SRNP-2923, 4 Sep 2001, ♀; 01-SRNP-2924, 17 Sep 2001, ♀ (X-5808); 01-SRNP-2947, 8 Sep 2001, ♂ (X-5069); 01-SRNP-3300, 9 Oct 2001, ♂; 01-SRNP-3727, 8 Nov 2001, ♂; 01-SRNP-3782, 23 Oct 2001, ♀ (X-5070); 01-SRNP-25089, 14 Jan 2002, ♂ (X-5809); 02-SRNP-2271, 26 Apr 2002, ♀; 02-SRNP-19803, 21 Dec 2002, ♂ (X-5807); 03-SRNP-6806, 12 Aug

2003, ♀ (X-6043); 03-SRNP-7308, 6 Aug 2003, ♀; 03-SRNP-7387, 17 Aug 2003, ♂; 03-SRNP-9990, 30 Nov 2003, ♀; 03-SRNP-12536.1, 3 Oct 2003, ♂; 03-SRNP-12588.1, 19 Oct 2003, ♀; 03-SRNP-20865, 3 Oct 2003, ♀; 04-SRNP-30865, 26 Apr 2004, ♀. Guapiles, May, 1 ♂ (X-5071). Turrialba, 27 Mar 1969, 1 ♂, V. King. PANAMA: Canal Zone, La Pita, 11 Jun 1963, 1 ♂ (S. S. Nicolay genitalia dissection H359), G. B. Small. Cerro Campana, 1500 ft (455 m), 10 Jan 1964, 1 ♀ (X-5072), G. B. Small.

Telemiades corbulo, **new combination**.—10 ♂, 4 ♀ (5 ♂, 3 ♀). BRAZIL: Pará, Óbidos, no date, 1 ♂ (E. L. Bell genitalia dissection G645), 1 ♀, AMNH. Rondônia, vic. Cacauplandia, 10°32'S, 62°48'W, 160–350 m, 22 Oct 1991, 1 ♂ (X-5077), J. MacDonald. ECUADOR: Napo, Limoncocha, Río Napo, 240 m, 9 Feb 1971, 1 ♂ (S. S. Nicolay genitalia dissection H466), S. S.



Figs. 4–6. Male genitalia of *Telemiades corbulo* from Puerto Napo, 540 m, Napo, Ecuador, 7 Nov 1988. S. S. Nicolay (X-5075); scale = 1.0 mm. 4. Tegumen, uncus, and gnathos in dorsal view. 5. Complete genitalia (minus right valva), with everted vesica, in left lateral view. 6. Cornuti at distal end of vesica in another view.

& S. Nicolay; Puerto Napo, 540 m, 7 Nov 1988, 1 ♂ (X-5075), 1 ♀ (X-5076), S. S. Nicolay, 9 Nov 1988, 1 ♂, D. H. Ahrenholz. FRENCH GUIANA: Cayenne, Dec 1903, 1 ♀ (X-6045). St. Laurent, no date, 1 ♂, AMNH. Vidal, 4°52'N, 52°18'W, 0–50 m, 7 Nov 1988, 1 ♂, D. J. Harvey; 11 Nov 1988, 1 ♀ (X-5074), D. J. Harvey; 18 Nov 1988, 2 ♂ (X-5073), D. J. Harvey. PERU: Loreto, Iquitos, 21 Feb 1932, 1 ♂, AMNH.

DISCUSSION

Genitalia.—*Telemiades oiclus* and *T. corbulo* are united (figuratively) by their genitalia, which, in each sex, are clearly variations on the same theme (cf. Figs. 1–10). However, despite many basic similarities, the intricate male genitalia differ in unmistakable ways. These include (a) the mid-dorsal, distal end of the uncus—in dorsal view, convex (Fig. 1) in *T. oiclus* vs. concave (Fig. 4) in *T. corbulo*; (b) the middor-

sal center of the uncus—with a small dorsally-directed cone (Figs. 1–2) in *T. oiclus* vs. no such protuberance (Figs. 4–5) in *T. corbulo*; (c) the dentate, upcurved, distal end of the valva—in lateral view, with two or more major points (Fig. 2) in *T. oiclus* vs. one very major point (Fig. 5) in *T. corbulo*; and (d) a short secondary sac off the main everted vesica—with 0, 1 (Fig. 2), 2, or 3 spines in *T. oiclus* vs. a row of spines (Fig. 5) in *T. corbulo*. The simpler female genitalia differ most notably in the width of the midventral U-shaped notch in the posterior margin of the lamella postvaginalis—narrow (Fig. 7) in *T. oiclus* vs. wide (Fig. 9) in *T. corbulo*. Having been caught in copulo, the male and female of *T. corbulo* whose genitalia appear in Figs. 4–6 and Figs. 9–10 were literally united by them.

Previously, the male genitalia of *T. corbulo* have been adequately, albeit inexactly, figured by Williams and Bell (1933: pl. IV, fig. 3) and by Evans (1953: pl. 28, fig.

E[.17]. Although Williams and Bell (1933: 83) claimed that "the left [valva] is similar to the right but the apex is more rounded externally," there is no sign of such asymmetry in the *T. corbulo* dissections at hand. Nevertheless, two species of *Telemiades* described by Evans do have distinctly asymmetric valvae (Evans 1953: pl. 27, figs. E.6.7.trenda, E.6.9.sila), as do a few other described and undescribed species of *Telemiades*. Mielke (1993: 614, 616, fig. 22) illustrated the female genitalia of what he variously called the holotype/lectotype of *Pythonides insulsus* Draudt, which is considered one of the synonyms of *T. corbulo* (the other is *Eudamus praestes* Hewitson). Noting that the female genitalia do not agree with those of *PyrDALUS corbulo* whereas the rest of the type specimen externally looks like *P. c. corbulo* from southern Brazil, Mielke (1993: 614) allowed that the abdomen may be that of another species. It must be, because Mielke's fig. 22 does not look like Figs. 9–10 (either that, or Draudt's *insulsus* is not a synonym of *T. corbulo*).

Where in *Telemiades* does *PyrDALUS* fit? It clearly relates to *T. nicomedes* (Möschler). This species—originally described from Colombia, and now thought to range from at least adjacent northeastern Peru and northern Brazil to Mexico—may be a species complex. To date, in the ACG, only 2 ♂, 2 ♀ of this possible complex have been reared. The ACG sample is too small, and comparative material of diverse geographic origin is too limited, to resolve the matter at this time (but the four ACG specimens themselves appear to be a single species). So the name *T. nicomedes* is used here in the sense of "*T. nicomedes* or an undescribed species quite near it."

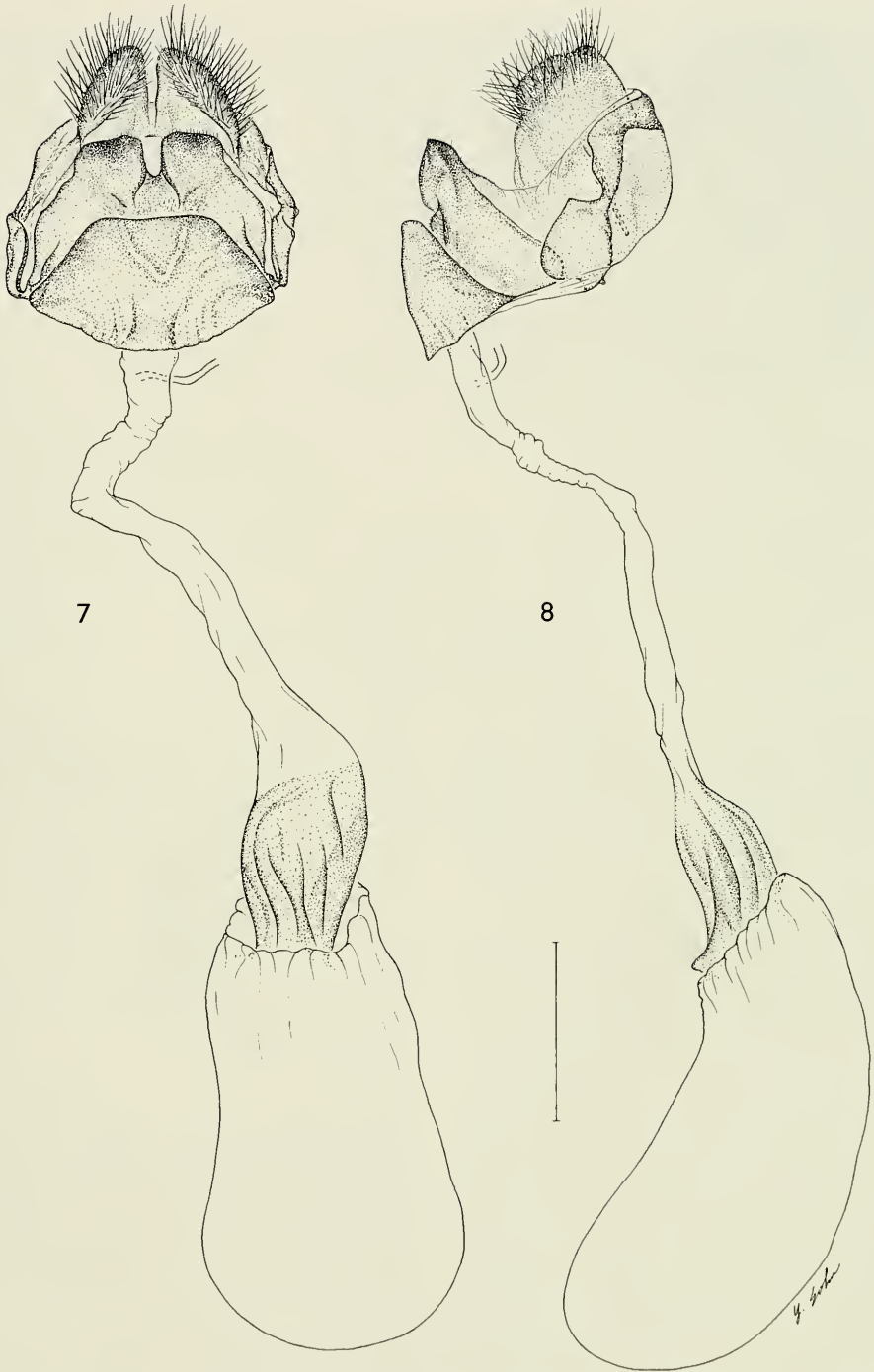
The intricate male genitalia of *T. oiclus* and *T. corbulo* (Figs. 1–6) are remarkably similar to those of *T. nicomedes*. In *T. nicomedes*, both the valvae and the cornuti resemble those of *T. corbulo*, while the middorsal, distal end of the uncus (which is squared to rather rounded) approaches that

of *T. oiclus*. Notwithstanding the close overall resemblance, *T. nicomedes* differs in various small ways. In all three species (and in many other species of *Telemiades*, as well), two pairs of lateral prongs project backward from the posterior end of the tegumen. In all three species, the more dorsal prong is pointed at its tip, while the more ventral prong is rounded (Figs. 1–2, 4–5). In both *T. oiclus* and *T. corbulo*, these prongs go straight backward; and the round-tipped prong extends well back (Figs. 1–2, 4–5)—at times, almost as far as does the pointed one (Figs. 1–2). But in *T. nicomedes*, the ventral, round-tipped prong extends back only as far as the base of its dorsal, pointed counterpart; and that pointed prong curves perceptibly dorsad instead of going essentially straight backward. Furthermore, the anterior end of the aedeagus bends to the left in *T. nicomedes* but remains straight in *T. oiclus* and *T. corbulo*.

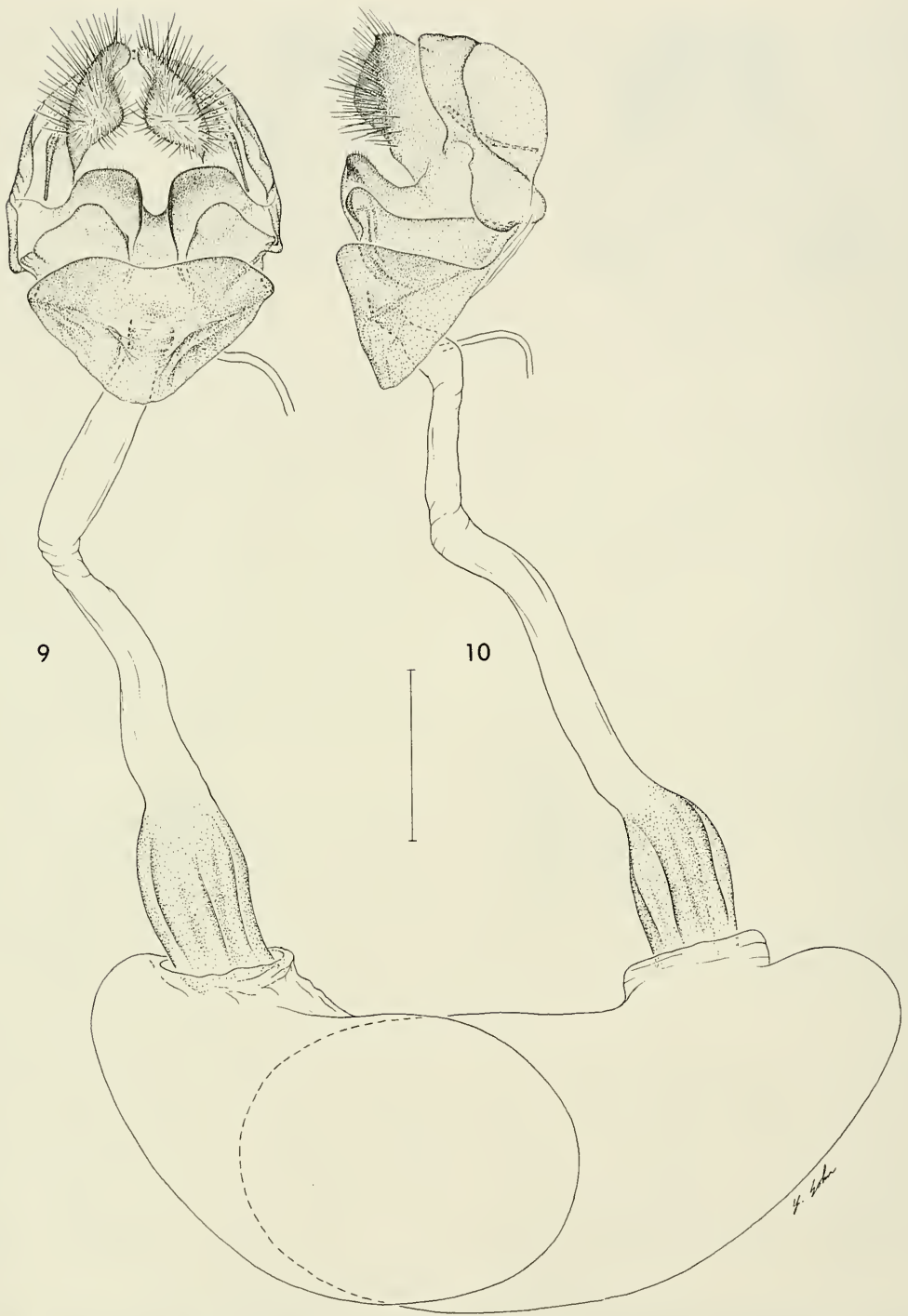
Likewise, the simpler female genitalia of *T. oiclus* and *T. corbulo* (Figs. 7–10) are very like those of *T. nicomedes*. A notable difference is the more anterior position, in *T. nicomedes*, of a narrow, C-shaped "ring" of sclerotization around the posterior end of the ductus bursae, posterior to the entrance of the sperm duct. Anterior to that, in all three species, the long, narrow, mostly to wholly membranous ductus bursae increases in diameter and becomes sclerotized before uniting with the membranous corpus bursae.

DNA barcoding (a la Hebert et al. 2004) of some 360+ species of reared ACG hesperiids independently indicates that *T. oiclus* and *T. nicomedes* are closely related, but distinct, species—and that they are more distinct from the other species of *Telemiades*, but cluster with them (Hajibabaei, Hebert, Burns, Janzen, and Hallwachs, unpublished).

Male secondary sex character.—*Telemiades oiclus* and *T. corbulo* share, in addition to the costal fold, a male secondary sex character not otherwise evident in the genus *Telemiades*. On the dorsal hindwing, a tuft



Figs. 7-8. Female genitalia, ovipositor lobes, and part of ductus seminalis of *Telemiades oichus* from the ACG, Costa Rica (00-SRNP-22202, X-5062); scale = 1.0 mm. 7, Ventral view. 8, Right lateral view.



Figs. 9-10. Female genitalia, ovipositor lobes, and part of ductus seminalis of *Telemiades corbulo* from Puerto Napo, 540 m, Napo, Ecuador, 7 Nov 1988, S. S. Nicolay (X-5076); scale = 1.0 mm. 9, Ventral view. 10, Right lateral view.

of long hairlike scales begins at the base of space 7 and projects distally, along space 7, halfway to the outer margin; surrounding wing scales, in space 8 and the proximal three-quarters of space 7 (plus, in *T. oiclus*, the proximal end of space 6), appear grayish and shiny (Figs. 19–20). On the adjacent ventral forewing, scales with a similarly grayish, shiny look—in at least the proximal three-fifths of spaces 1a and 1b and the lower, proximal end of space 2—surround an elongate, oval androconial patch near the proximal end of the lower half of space 1b (Figs. 12, 16). In *T. corbulo* the grayish forewing scales in space 1a extend nearly to the outer margin (Fig. 16). Both the dorsal hindwing tuft (Fig. 20) and the ventral forewing androconial patch (Fig. 12) that is associated with it are somewhat orangy tan in *T. oiclus*. In *T. corbulo* the tuft is mostly brown (Fig. 19), the androconial patch is cream (Fig. 16), and there is another creamy patch on the dorsal hindwing directly beneath the tuft.

Facies.—*Telemiades oiclus* is a brown skipper in which the tornal half of the ventral hindwing is yellow (Figs. 11–14). The yellow is clearer and a little more extensive in females (Fig. 14) than it is in males (Fig. 12). (However, the one Panamanian male examined has no yellow at all.) In sharp contrast, *T. corbulo* is a brown skipper that weakly reflects a bluish/purplish color from the dorsal surface of both pairs of wings (Figs. 15–18).

Telemiades oiclus and *T. corbulo* differ greatly in wingshape. *Telemiades corbulo* displays the usual hesperiid sexual dimorphism in which the wings of females (Figs. 17–18) are broader and rounder than those of their mates (Figs. 15–16). But *T. oiclus*, like one of four new species of *Venada* (Burns and Janzen 2005), suppresses this dimorphism so that the wings of males are as broad and round as those of females (Figs. 11–14). The difference in shape between males of *T. oiclus* and males of *T. corbulo* is especially pronounced in the hindwing, which is relatively long and nar-

row in *T. corbulo* (cf. Figs. 19–20). The degree of sexual dimorphism in wingshape shown by *T. corbulo* is representative of the genus *Telemiades*. Note the similarity of male wingshape in *T. corbulo* (Figs. 15–16) and *T. nicomedes* (Figs. 23–24).

Mimicry.—A color pattern essentially similar to that of *T. oiclus* has evolved, more or less independently, in 13 other species of skippers reared in the ACG (an asterisk marks those whose hindwing yellow is dorsal as well as ventral): the pyrgines **Typhedanus ampyx* (Godman and Salvin), **Astrartes phalaecus* (Godman and Salvin), *A. chiriquensis* (Staudinger), **A. anaphus annetta* Evans, *Ocyba calathana calanus* (Godman and Salvin), **Telemiades gallius* (Mabille), **reinstated status**, **T. chrysorrhoea* (Godman and Salvin), **reinstated status**, *Eracon lachesis* (Dyar), **reinstated status**, *Aethilla lavochrea* Butler, and *Achlyodes busirus heros* Ehrmann; and the hesperiines **Tromba xanthura* (Godman), *Damas immacula* Nicolay (females only), and *Aroma henricus* (Staudinger). Images of these presumably mimetic hesperiids appear in Janzen and Hallwachs (2005).

Tangential comments on the three species with reinstated status are in order. Evans (1953: 25) erroneously treated *Telemiades gallius* as a subspecies of *T. centrites* (Hewitson) and went on to synonymize *T. chrysorrhoea* with *T. centrites gallius*. Judging from his comparative figures of the male valvae (Evans 1953: pl. 27, figs. E.6.4.centrites/gallius), *T. gallius* must be specifically distinct from *T. centrites*. Furthermore, *T. gallius* and *T. chrysorrhoea* are separate (but sister) species. Their genitalia differ subtly, in both sexes, as do their facies: the hindwing yellow of *T. gallius* is orange (and a little less extensive) in *T. chrysorrhoea*; and all 139 reared ACG specimens of *T. chrysorrhoea* lack the three small, hyaline, subapical white spots in spaces 6, 7, and 8 of the forewing that mark *T. gallius*. In the ACG, *T. chrysorrhoea* is a common cloud forest species (800–1400



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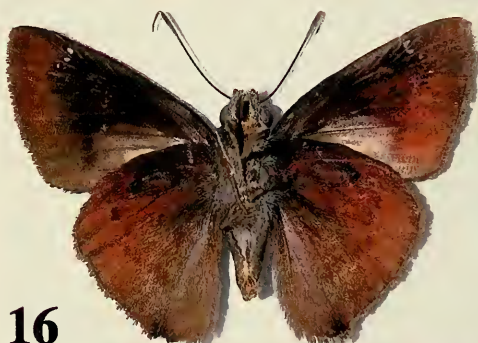
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Figs. 11–18. Adults, in dorsal (left) and ventral (right) views, of two species moved to *Telemiades*. 11–14, *T. oichus*, reared in the ACG, Costa Rica. 11–12, ♂ (×1.8), 01-SRNP-3727. 13–14, ♀ (×1.5), 03-SRNP-9990. 15–18, *T. corbulo*, wild-caught at Vidal, 0–50 m, 4°52'N, 52°18'W, French Guiana, by D. J. Harvey. 15–16, ♂ (×1.6), 7 Nov 1988. 17–18, ♀ (×1.6), 11 Nov 1988 (X-5074).



Figs. 19–26. Various features and stages of *Telemiades* species that (except for *T. fides*) are closely related. 19–20, Dorsal hindwings showing different overall shapes, plus tufts of a secondary sex character, in *T. corbulo* (left) and *T. oichus* (right). 21, Pupa 01-SRNP-2441 of *T. oichus* in ventral view. 22, Last instar caterpillar 01-SRNP-2441 of *T. oichus*. 23–24, Adult 03-SRNP-21802 (X-5784) of *T. nicomedes* in dorsal (left, $\times 1.1$) and ventral (right, $\times 1.2$) views. 25, Pupa 03-SRNP-10917 of *T. fides* in dorsal view. 26, Last instar caterpillar 03-SRNP-27835 of *T. nicomedes*.

m elevation), while *T. gallius* is a rare, mid-elevation, rainforest species (600–900 m). DNA barcoding cleanly separates these two species (Hajibabaei, Hebert, Burns, Janzen, and Hallwachs, unpublished).

Never having seen specimens of *Ebrietas lachesis* Dyar, Evans (1953: 66) hesitantly (and erroneously) placed this taxon in his new genus *Morvina*, as a subspecies of *M. falisca* (Hewitson). Mielke (2004) lists *Ebrietas lachesis* as a synonym of *Eracon paulinus* (Stoll). *Eracon lachesis* and *E. paulinus* are close—but distinguishable—species in what may be a species complex. Unlike *E. lachesis*, *E. paulinus*, in dorsal view, is proximally gray on both pairs of wings and is, on the distal hindwing, so blackish brown that the dark bands there are obscured, especially in males. Ventrally, males of *E. paulinus* do not express as much hindwing yellow as do males of *E. lachesis*. Male genitalia differ slightly: near the anterodorsal corner of the valva, a narrow strip of fine dentation running along most of the dorsal edge of the valva bends sharply ventrad onto the inner surface of the valva, and extends farther ventrad in *E. paulinus* than in *E. lachesis*. Dissection and close comparison of male genitalia included the holotype of *lachesis* (from Teapa, Tabasco, Mexico) in the USNM. *Eracon lachesis* is the larger species. It ranges from southern Mexico to Panama, whereas *E. paulinus* is mainly South American. Nevertheless, the two species were taken together, in 1969 and again in 1970, by S. S. Nicolay at about 455 m on Santa Rita Ridge, east of Colon, in Colon province, Panama—a locality pinpointed (as Cerro Santa Rita) in Ridgely (1976: 359). So far, 40 ♂, 29 ♀ of *E. lachesis* have been reared in the ACG.

Pupa.—The pupa of *T. oiclus* (Fig. 21) shares distinctive features with the pupae of other species of *Telemiades*, including *T. fides* Bell (Fig. 25). These features include a short, fat, conspicuous cone that projects straight forward from an interocular position at the anterior end of the head; a swol-

len “midsection” (at the level of the anterior end of the abdomen); and, posterior to that, an abdomen that tapers sharply to the cremaster. All *Telemiades* pupae are shiny amber to amber brown, lacking a white waxy layer and markings (see images in Janzen and Hallwachs 2005).

Caterpillar.—Despite having dorsolateral, longitudinal, brown stripes peculiar to it, the last instar of *T. oiclus* (Fig. 22) resembles that of *T. nicomedes* (Fig. 26). Both are light to medium brownish and heavily dotted dorsally with fine, glistening white spots that give an overall impression of a moist slug. In this connection, the caterpillar of *T. oiclus* is especially plump and squat. Caterpillars of both species crawl with a slow, somewhat gliding motion. Moreover, if prodded, they hold their ground (like a slug), instead of crawling quickly away or turning to bite the molester. Penultimate and ultimate instar *T. oiclus* have been found resting exposed on the dorsal surface of a foodplant leaf, rather than in a silk-and-leaf shelter like most skippers. Last instar *T. nicomedes* make only a halfhearted attempt at a shelter, which may be just one leaf lightly tacked with silk to the leaf below.

Foodplants.—So far, eight species of *Telemiades* have been reared in the ACG (from a total of 2068 *Telemiades* caterpillars). All eight feed strictly on plants in the Fabaceae, and six feed mainly or exclusively on mature leaves of various species of the mimosoid genus *Inga*. Different species of *Telemiades* commonly share the same species of *Inga*. For example, five species of *Telemiades* eat *I. oerstedia* Benth. ex Seem. and *I. sapindoides* Willd., and four eat *I. punctata* Willd. Some of these *Inga*-eaters occasionally attack the mimosoid genera *Pithecellobium*, *Zygia*, and *Cojoba*. Each of two species of *Telemiades* reared in large numbers has been found on as many as 18 mimosoid legumes. Moss (1949) found three species of *Telemiades* in Amazonian Brazil feeding on *Inga*, and two of those on *Pithecellobium*, as well.

In contrast, *T. oiclus* specializes on the papilionoid legume *Dioclea*, eating mature leaves of both *D. malacocarpa* and *D. wilsonii*. Likewise, the rare *T. nicomedes* uses the papilionoid genus *Machaerium*, eating mature leaves of both *M. acuminatum* Kunth and *M. seemannii* Benth.

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